



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,498	08/01/2001	Tadanori Sugimoto	Q65700	3223

7590

06/30/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037

EXAMINER

CINTINS, IVARS C

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 06/30/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/918,498

Applicant(s)

Sugimoto et al.

Examiner

Ivars Cintins

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Apr 11, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above, claim(s) 6-10 is/are withdrawn from consideration
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, and 5 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 1724

Applicant's election without traverse of Group I, claims 1-5, in Paper No. 8 is acknowledged. Claims 6-10 are withdrawn from further consideration, as being directed to a non-elected invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 4 and 5 are again rejected under 35 U.S.C. 102(e) as being anticipated by Schafer et al. (U.S. Patent No. 6,153,101). The reference discloses (see Fig. 1) an ion chromatography system comprising: a separating mechanism 2, a suppressor mechanism 6 coupled to the separating mechanism, which suppressor mechanism has a main body (i.e. between pipe connections 35) containing ion exchange resin for reducing the electric conductivity of eluted liquid from the separating mechanism (see col. 6, lines 4-13), and a detector 4 coupled to the suppressor mechanism to detect ions in the eluted liquid from the suppressor mechanism. This reference suppressor mechanism further includes automatic exchanging means (see Fig. 5) for

Art Unit: 1724

discharging the ion exchanger from the main body and for supplying regenerated ion exchanger to the main body after a predetermined number of detections are performed by the detector (col. 6, lines 17-18). Since the automatic exchanging means of the reference performs substantially the same function as the automatic exchanging means described in the specification (see page 7, lines 4-8), to produce substantially the same results, this reference automatic exchanging means is deemed to be equivalent to the recited automatic exchanging means. Applicant should again note that although the reference automatic exchanging means replaces used ion exchange resin with regenerated ion exchange resin, this system is inherently capable of replacing used ion exchange resin with virgin ion exchange resin (i.e. by placing such virgin resin in container 6); and this capability is all that is required by apparatus claims 1, 4 and 5.

Applicant's arguments filed December 11, 2002 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant has amended claim 1 to recite "means plus function" language for the automatic exchanging means, thus invoking the sixth paragraph of 35 U.S.C. § 112. Applicant then argues that this language "requires that

Art Unit: 1724

the prior art element perform the *identical function* specified in the claims." This argument does not appear to be well founded. The "means plus function" language now recited in claim 1 is construed to cover the corresponding structure described in the specification and equivalents thereof. There is nothing in the language of the sixth paragraph of 35 U.S.C. § 112 which requires that the reference element actually perform the recited function. The reference automatic exchanging means is inherently capable of replacing used ion exchange resin with virgin ion exchange resin, and this capability is all that is required by apparatus claims 1, 4 and 5. Applicant should also note that since the automatic exchanging means of Schafer et al. includes a device which discharges a used ion exchanger from the main body of the suppressor (i.e. between pipe connections 35) and supplies ion exchanger accommodated in a chamber to the main body (see Fig. 5), this reference automatic exchanging means performs substantially the same function as the claimed automatic exchanging means, to produce substantially the same result; and therefore, this reference element is deemed to be equivalent to the claimed automatic exchanging means.

Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowed if rewritten in

Art Unit: 1724

independent form to include all of the limitations of the base claim and any intervening claims.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (703) 308-3840. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Blaine Copenheaver, can be reached at (703) 308-1261.

Serial Number: 09/918,498

Page 6

Art Unit: 1724

The fax phone numbers for this art unit are: (703) 872-9311 for "Official" faxes after Final Rejection; (703) 872-9310 for all other "Official" faxes; and (703) 872-9492 for "Draft" and other "Unofficial" faxes.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

*Ivars C. Cintins*  
**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
June 26, 2003